

ICS 103  
Sample Quiz 2

Question 1: (4 points)

Write the results of the expressions shown below:

| Expression                        | Result |
|-----------------------------------|--------|
| <code>!0 &amp;&amp; 1    0</code> |        |
| <code>100 + 3 &gt; 5 * 2</code>   |        |
| <code>10 &gt; 5 &gt; 2</code>     |        |
| <code>!(100/20 == 20/4)</code>    |        |

Question 2: (7 points)

Determine the output of the following programs for each of the input values entered by the user. If no output is displayed, write "No Output"

I)

```
#include <stdio.h>
int main(void)
{
    int x,y;
    printf("Enter the values of x and y\n");
    scanf ("%d%d", &x, &y);
    if (x==8)
    if (y=5)
        printf("A ");
    else
        printf("B ");
    printf("C ");
    printf("D ");
    return 0;
}
```

| User Input | Program Output |
|------------|----------------|
| 5 8        |                |
| 7 5        |                |
| 8 1        |                |

II)

```
#include <stdio.h>
int main(void)
{
    int x,y;
    printf("Enter the values of x and y\n");
    scanf ("%d%d", &x, &y);
    if( !(x<5) || !(y>=7) )
        printf("A ");
    if( y==7 )
        printf("B \n");
    else if( x=5 )
        printf("C\n");
    return 0;
}
```

| User Input | Program Output |
|------------|----------------|
| 5 7        |                |
| 3 7        |                |
| 3 6        |                |
| 3 8        |                |

See Next Page!

**Question 3: (4 points)**

Consider the following program. What will be the output for the different values of x typed by the user?

```
#include <stdio.h>
int main() {
int x;
scanf( "%d" ,&x);
switch(x) {
    case 3:
    case 6: if (x==6)
                x=x-5;
                x=x+11;
    case 1:
    case 0: x=x+2;
    case 4: break;
    case 2: x=x+5;
                break;
    default : x=x-9;
}
printf( "%d\n" ,x);
return 0;}
```

| Value of x typed by user | Program output |
|--------------------------|----------------|
| 3                        |                |
| 6                        |                |
| 5                        |                |
| 4                        |                |